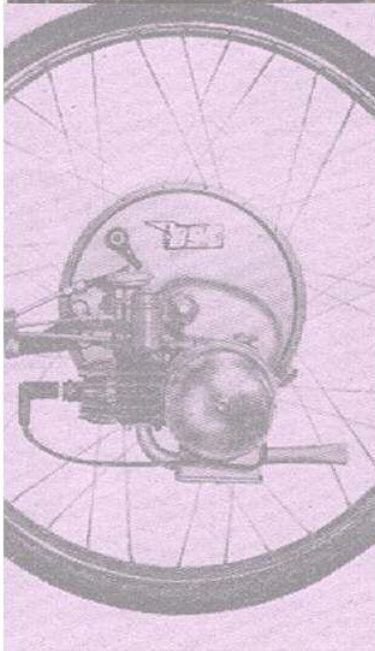


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Mercury Lightweight Scooter

93 c.c. Villiers-powered Newcomer—the Pippin—Featuring Extremely Robust Frame Design

AS announced last week, a new 98 c.c. Mercury scooter designated the Pippin is shortly to go into production. Although the engine, a Villiers two-speed Mark 4F, is the same as that fitted to the Mercury Dolphin scooter (which is continued), the Pippin is an entirely new design based on an unusual and obviously robust frame which has successfully completed five months' testing at a Midlands research laboratory.

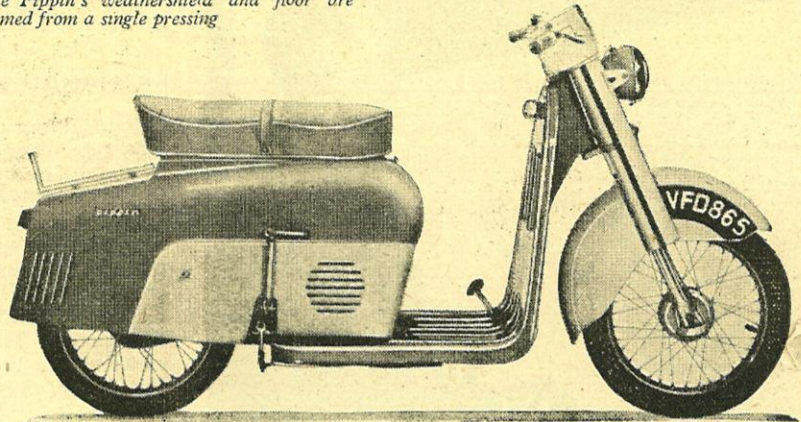
At first sight the major part of the frame would seem to be formed from a single length of 1in x 16-gauge tubing; but there are, in fact, three main components: two side tubes, and a third, medial tube, interposed between the bottom of the steering head and a bridge tube bracing the side tubes' bottom runs.

The upper end of the steering head is attached to a fabricated steel lug welded to the middle of the main-frame forward loop. Rearward frame loops are braced by vertical tubes, to which is welded a cross member to support the upper-rear engine-mounting brackets. Other power-unit mountings are provided by means of a channel-section support, welded to the lower run of the middle frame tube, and by a single lug welded to a second cross-brace in the frame lower runs.

Brackets for the brake-pedal and centre-stand pivots are welded to the middle frame tube, and strip-steel brackets, which support the bodywork and fuel tank through rubber buffers, are welded to the upper runs of the side tubes. Ears to support the unsprung rear wheel project rearward from the frame side tubes.

Angle brackets at each side of the frame support the footboard pressing.

The Pippin's weathershield and floor are formed from a single pressing



The main body section is simply attached by means of two screws on each side, locations for which are provided by bosses welded to the vertical bracing tubes and to the extreme rear of the frame loops. The body is a one-piece structure comprising side pressings spot welded to a middle portion. An aperture on the front curvature, ahead of the dual-seat, is provided with a hinged door to give access to the sparking plug. A snap connector in the rear-lamp cable is also reached through the trap; the cable is attached to clips on the underside of the body so that, after the cable and the two slotted-head screws at each side have been disconnected, the entire body can be lifted clear. A further aperture beneath the side-hinged dual-seat reveals the filler cap; the seat is released for access to the filler cap by a pull on a spring-loaded plunger with a plastic knob. The tool bag is riveted to the underside of the seat pan. A simple rear mudguard, hidden beneath the bodywork, protects

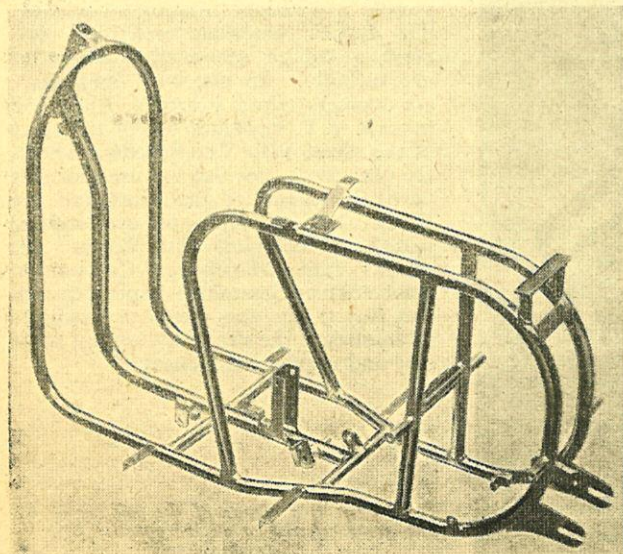
the engine and gear box from road filth thrown up by the wheel. The rear chain is exposed.

Weathershield and footboards comprise a single pressing, shaped to follow the contour of the forward vertical loop of the frame over which it is lipped. The weathershield has a front cover which extends downward to the base of the frame loop; the cover conceals the loop and carries a steering-head shroud. Control and lighting cables from the handlebar pass into the space between the front cover and main weathershield and thus a tidy appearance is maintained.

The front fork is of simple telescopic pattern and a sheet-metal shroud encloses the upper parts of the legs. A shapely steel pressing covers the middle of the handlebar and has provision for fitting a speedometer and a handlebar windscreen both of which are offered at extra charge. On the right of the bar is an Amal twistgrip with the brake-lever pivot and choke trigger integral with the grip clamp. Inboard of the twistgrip is the Villiers gear-change trigger; an ignition cut-out button is located just under the edge of the handlebar shroud. Clutch lever, dip-switch and horn button are located on the left of the bar.

Carried in brackets extending forward through the fork-leg shroud, the 5½in Miller headlamp has internal provision for a dry battery for parking; current for lighting, when the engine is running, is provided by the flywheel magneto. The power unit is cooled by means of a light-alloy fan of Villiers manufacture mounted on an extension of the right-hand mainshaft. Cooling air is directed on to the cylinder and head by sheet-steel ducting. Overall gear ratios are 7.77 and 12.7 to 1.

At 52½in the nominal wheelbase of the Pippin is 4in shorter than that of the Dolphin. Dunlop tyres of 2.50in section are fitted to the 15in-diameter wire



The main frame is constructed from 1in x 16-gauge tubing and during development it was subjected to five months' testing in a research laboratory

